

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

To:
GLAXOSMITHKLINE
 Corporate Intellectual Property
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Corporate IP

17 MAY 2005

Received NEFP

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

<p>Applicant's or agent's file reference JNR / PB60028</p> <p>International application No. PCT/GB2005/000399</p> <p>Applicant GLAXO GROUP LIMITED</p>	<p>Received BRENTFORD</p> <p>16 MAY 2005</p> <p>IPM : N/A</p>	<p>Date of mailing (day/month/year)</p> <p>International filing date (day/month/year)</p> <p>ON UPDATED ON 18/5/05</p>	<p>FOR FURTHER ACTION See paragraphs 1 and 4 below</p> <p>04/02/2005</p>
<p>ATTY CHECKED/FILE</p>			

1. The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority
 European Patent Office, P.B. 5818 Patentlaan 2
 NL-2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
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Authorized officer

Martin Zibell

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JNR/PB60028	FOR FURTHER ACTION		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/GB2005/000399	international filing date (day/month/year) 04/02/2005	(Earliest) Priority Date (day/month/year) 06/02/2004	
Applicant GLAXO GROUP LIMITED			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box II).

3. **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

FLUID DOSING DEVICE COMPRISING GEAR TRANSMISSION ACTUATOR

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB2005/000399

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A delivery device for delivering a metered amount of substance on each actuation thereof, comprising: a delivery unit (7) comprising a metering cavity (35) in fluid communication with a reservoir (23) and a piston member (43) reciprocatingly movably disposed in the metering cavity (35), the piston member (43) being movable in a first direction to a first, primed position to draw substance into the metering cavity (35) and a second direction, opposite to the first direction, to a second, delivered position to meter and deliver a metered amount of substance from the metering cavity (35); and an actuation mechanism (9) comprising an actuator member (53). The actuator member (53) is configured to effect the reciprocating movement of the piston member (43) on application of the actuation force (F).

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/000399

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B05B11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2004/026489 A (PHARMACIA AB) 1 April 2004 (2004-04-01) page 8, line 4 – page 11, line 8; figures 10-18 ----- US 4 623 337 A (MAURICE, DAVID M.) 18 November 1986 (1986-11-18) column 4, line 63 – column 5, line 34; figure 9 ----- DE 100 17 438 A1 (KATZ, OTTO) 11 October 2001 (2001-10-11) paragraph '0031!; figure 1 ----- -/-	1-3,12, 16-21, 33-35
X		1-3,12, 16-21, 29,33-35
A		1,19



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

6 May 2005

Date of mailing of the international search report

17/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Innecken, A

INTERNATIONAL SEARCH REPORT

International Application No PCT/GB2005/000399

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/068317 A (COHEN, BEN Z.; KELLY, NIGEL) 6 September 2002 (2002-09-06) page 3, line 16 – page 9, line 11; figures 2-4 -----	1,19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/000399

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 2004026489	A	01-04-2004	AU WO US	2003253555 A1 2004026489 A1 2005077315 A1		08-04-2004 01-04-2004 14-04-2005
US 4623337	A	18-11-1986		NONE		
DE 10017438	A1	11-10-2001		NONE		
WO 02068317	A	06-09-2002	EP WO	1385779 A1 02068317 A1		04-02-2004 06-09-2002

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/GB2005/000399

International filing date (day/month/year)
04.02.2005

Priority date (day/month/year)
06.02.2004

International Patent Classification (IPC) or both national classification and IPC
B05B11/00

Applicant
GLAXO GROUP LIMITED

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Innecken, A

Telephone No. +49 89 2399-8911



Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 a sequence listing
 table(s) related to the sequence listing
 - b. format of material:
 in written format
 in computer readable form
 - c. time of filing/furnishing:
 contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/000399

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or
industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	4-11,13-15,22-32
	No: Claims	1-3,12,16-21,33-35
Inventive step (IS)	Yes: Claims	4-11,13-15,22-32
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-35
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Novelty, inventive step, and industrial applicability (Item V)

Claim 1

1. From **US4623337 (D1)** (see column 4, line 63 to column 5, line 34 and figure 9) there is known a delivery device 140 for delivering a metered amount of substance on each actuation thereof, comprising: a delivery unit operable to deliver a metered amount of substance, the delivery unit including a piston member 160 which, in a reciprocating movement, primes, meters and delivers a metered amount of substance; and an actuation mechanism 164,168,172 actuatable by a user to operate the delivery unit, the actuation mechanism 164,168,172 comprising an actuator member 172 to which a user applies an actuation force in substantially a single direction, and being configured to effect the reciprocating movement of the piston member 160 on application of the actuation force.
2. Thus, it appears that the subject-matter of claim 1 is not new as required by Article 33(2) PCT.

Claims 2, 3, 12, 16 to 21, and 33 to 35

3. Document (D1) (loc. cit.) also discloses the features of claims 2, 3, 12, 16 to 21, and 33 to 35. Thus, it appears that the subject-matter of these claims is not new as required by Article 33(2) PCT.

Certain defects in the international application (Item VII)

4. Independent claims 1 and 19 are not drafted in the two part form specified in Rule 6.3b) of the PCT.
5. The description does not cite a document reflecting the closest background art (see Rule 5.1a) ii) PCT).

Certain observations on the international application (Item VIII)

6. Although claims 1 and 19 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought. The aforementioned claims therefore lack conciseness. Hence, claims 1 and 19 do not comply with the requirements of Article 6 PCT.

7. Independent claim 36 does not meet the requirements of Article 6 PCT as it relies on a reference to the description and drawings (see PCT Preliminary Examination Guidelines, part II, 5.10).